

**Abstract**

Described is the use of nucleic acid molecules encoding subtilisin-like serine proteases and the modulation of the corresponding genes for the production of transgenic plants with altered stomata characteristics. Provided are recombinant DNA molecules comprising such nucleic acid molecules and complements thereof; wherein said nucleic acid molecule(s) are operably linked to regulatory elements allowing the expression of the nucleic acid molecule(s) in plants. Also provided are vectors comprising said recombinant DNA molecules as well as plant cells, plant tissues and plants transformed therewith. In addition, the use of the aforementioned nucleic acid molecules, recombinant DNA molecules and vectors in plant cell and tissue culture, plant breeding and/or agriculture is described, in particular for the production of plants with improved phenotypes.